



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/733,569

12/12/2003

Choong-Jae Lee

P-0586

1640

34610 7590 10/18/2007
KED & ASSOCIATES, LLP
P.O. Box 221200
Chantilly, VA 20153-1200

EXAMINER

HAROON, ADEEL

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

10/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,569

Applicant(s)

LEE, CHOONG-JAE

Examiner

Adeel Haroon

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-11, 13-20 and 23 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 12, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/7/07 has been entered.

Response to Arguments

2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Art Unit: 2618

4. Claims 1, 3, 8, 9, 11, 13-16, 18, 20, and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by Jung (U.S. 2002/0128053).

With respect to claim 1, Jung discloses a folder type mobile terminal, element in figure 7 with an upper cover, element number 8, and lower cover, element number 4, wherein the upper cover and lower cover are configured to be attached so as to form a space there between (Paragraph 62). Jung also shows a display mounted in the space formed between the upper and lower covers in figure 7 (Column 3, lines 18-24). Jung further discloses an impact dispersing mechanism, 40 and 42, formed at edges of the covers to disperse an impact (Paragraph 62). Moreover, Jung teaches a first portion, element number 40, attached to the upper cover and a second portion, element number 42, attached to the lower cover and wherein a predetermined clearance in the form of an open air gap is maintained between the first portion and the second portion prior to an impact being applied to the upper cover (Paragraphs 68 and 69).

With respect to claim 3, Jung discloses a first rib, element number 40, formed to produce a constant width at an edge of the upper cover (Paragraph 68). Jung also discloses a second rib, element number 42, formed to protrude a constant width at an edge of the lower cover (Paragraph 69).

With respect to claim 8, Jung disclose a constant gap there between the first and second ribs, which is narrower the gap formed between the upper cover and display (Paragraphs 68 and 69).

With respect to claim 9, Jung discloses a folder type mobile terminal, element in figure 7 with an upper cover, element number 8, and lower cover, element number 4, wherein the upper cover and lower cover are configured to be attached so as to form a space there between (Paragraph 62). Jung also shows a display mounted in the space formed between the upper and lower covers in figure 7 (Column 3, lines 18-24). Jung further discloses an impact dispersing mechanism, 40 and 42, formed at edges of the covers to disperse an impact (Paragraph 62). Moreover, Jung teaches a first portion, element number 40, attached to the upper cover and a second portion, element number 42, attached to the lower cover and wherein a predetermined clearance in the form of an open air gap is maintained between the first portion and the second portion prior to an impact being applied to the upper cover (Paragraphs 68 and 69).

With respect to claim 11, Jung discloses a first rib, element number 40, formed to produce a constant width at an edge of the upper cover (Paragraph 68). Jung also discloses a second rib, element number 42, formed to protrude a constant width at an edge of the lower cover (Paragraph 69).

With respect to claims 13 and 14, Jung disclose a first gap of substantially constant height is formed between the first rib and the second rib when the first cover and the second cover are attached, and wherein a second gap of substantially constant height is formed between an upper surface of the display and a lower surface of the first cover when the first cover and the second cover are attached (Paragraphs 68 and 69).

With respect to claims 15 and 16, Jung disclose that the height of the first gap is reduced when an external force is applied and the height of the second gap remains greater than the height of the first gap (Paragraphs 68 and 69).

With respect to claim 18, Jung discloses a folder type mobile terminal, element in figure 7 with an upper cover, element number 8, and lower cover, element number 4, wherein the upper cover and lower cover are configured to be attached so as to form a space there between (Paragraph 62). Jung also shows a display mounted in the space formed between the upper and lower covers in figure 7 (Column 3, lines 18-24). Jung discloses a first air gap of substantially constant height formed between a lower surface of the at least one first rib and an upper surface of the at least one second rib wherein the second gap of substantially constant height is formed between an upper surface of the display and a lower surface of the first housing, and wherein the height of the second gap is greater than the height of the first gap when the first housing is attached to the second housing (Paragraphs 68 and 69).

With respect to claim 20, Jung teaches that the height of the second gap remains greater than the height of the first gap when an external force is applied to the first housing (Paragraphs 68 and 69).

With respect to claim 23, Jung discloses a folder type mobile terminal (Paragraph 60).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Murray et al. (U.S. 6,011,699).

With respect to claims 2 and 10, the mobile terminal of Jung is described above in the discussion of claims 1 and 9. Jung does not specifically disclose a print circuit board. However, Murray et al. discloses a similar two cover folder type mobile terminal with a display, 346, mounted on a printed circuit board, 316, in the space formed between the two covers (Column 4, lines 36-43). Therefore, it would be obvious to one ordinary skill in the art at the time of the applicant's invention to include a printed circuit board as taught by Murray et al. in the Jung mobile terminal in order to provide signals to the display.

7. Claims 6, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (U.S. 2002/0128053).

With respect to claims 6 and 17, Jung further discloses impact dispersing means, 58 and 60, that are formed at both the side edges of the upper and lower cover, respectively in another embodiment in figure 8. Therefore, it would be obvious to one of ordinary skill in the art to have the impact dispersing mechanisms at the side edges when a display is mounted in between in order to have more evenly spaced force dispersing mechanisms.

With respect to claim 19, the impact dispersing mechanism of Jung is described above in the discussion of claim 18. Jung shows a display screen in figure 7 but does not specifically disclose that the display is a LCD. However, the examiner takes Official Notice that LCD's are extremely well known in the art. Therefore, it would be obvious to one of ordinary skill in the art at the time of the applicant's invention to use a LCD in Lloyd's mobile terminal.

Allowable Subject Matter

8. Claims 4, 5, 12, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2618


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adeel Haroon whose telephone number is (571) 272-7405. The examiner can normally be reached on Monday thru Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH
10/12/07


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600